Docket No.: CIT/K-0107B

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought on the invention entitled METHOD OF SEARCHING OR BROWSING MULTI-MEDIA DATA AND DATA STRUCTURE, the specification of which

[X] is attached hereto [ ] was filed on _____ as Application Serial No. _____ and was amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known to me to be material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365 (b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s): Number	Country	Foreign Filing Date Month/Day/Year
2979/1999	Korea	January 29, 1999
35798/1999	Korea	August 27, 1999

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s):	Filing Date (Month/Day/Year)

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

Prior U. S. Application or PCT Parent Number	Filing Date (Month/Day/Year)	Parent Patent Number (if applicable)
09/493,038	January 28, 2000	

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) and/or agent(s):

34610
PATENT TRADEMARK OFFICE

with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and all future correspondence should be addressed to them.

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Full name of sole or first inventor: Jin Soo LEE	
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Residence Address (only if different from mailing address):	

Docket No: CIT/K-0107

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	
Jin Soo LEE and Hyeon Jun KIM	
Continuation of Serial No. 09/493,038	Group Art Unit: Unassigned
Confirm. No: Unassigned	Examiner: Unassigned
Filed: August 18, 2003	Customer No: 34610

For: METHOD OF SEARCHING OR BROWSING MULTIMEDIA DATA AND DATA STRUCTURE

DECLARATION UNDER 37 C.F.R. 1.132

U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window
Crystal Plaza Two, Lobby, Room 1B03
Arlington, Virginia 22202

Sir:

I, Jin-Soo Lee , hereby declare that:

1. I graduated from a University of Dong-Kook University, Seoul, Republic of Korea in 1995 where I received a BS degree in Computer Science engineering.

2. I graduated from Pohang University of Science and Technology, Republic of Korea in 1995 where I received an MS degree specialized in the area of Pattern Recognition and Neural Networks.

3. Since 1997, I have been employed at LG Electronics Inc. as a Senior Engineer, where my work principally focused on digital signal and image processing.

4. Throughout my academic and professional career, I have published articles, including: "Highly Accurate Recognition of Printed Korean Characters through an Improved Two-Stage Classification Method," Pattern Recognition 32 (1999) 1935-1945.

5. I am familiar with the level of ordinary skill in the art of data storage, processing, and searching systems, including systems and methods for storing, searching, retrieving, and processing image, video, and other forms of multimedia information from the time the claimed invention was made to the present time.

6. I have carefully and thoroughly read U.S. Patent application serial No. 09/493,038 and the continuation application based thereon to be filed in connection with this paper (corresponding to Attorney Docket No. CIT-K-i 07B, serial number not yet granted), presently pending claims 1-3, 5-12, 18, 20-25, and 27-5 8 included in the continuation application, and the references made of record during the examination of parent Application Serial No. 09/493,038.

7. Claim 1, as presently pending, recites a method of searching or browsing multimedia data. This method includes (a) receiving reference multimedia data with a data structure including features of said reference multimedia data and weight information of said features, wherein said data structure includes reliability information indicating a reliability of the weight information, (b) searching for said reference multimedia data using the features and the weight information, (c) receiving user feedback on a relevance of resultant multimedia data found in (b), (d) measuring a similarity of the reference multimedia data to the resultant multimedia data and calculating new weight information of said features using the measured value, and (e) updating the weight information of said features in said data structure of the reference multimedia data using the new weight information. The Wang patent does not teach or suggest this method.

8. The Wang patent discloses a method of searching for images stored in a database. This method includes receiving a search inquiry from a user which includes image attribute parameters indicative of a type of image to be retrieved from the database. Once the search has been performed, the images produced from the search are displayed on a monitor. The user then selects one or more of the most highly correlated images. The images produced from the search are then re-ranked and the image attribute parameters in the search inquiry are adjusted.

9. The Wang patent does not teach or suggest a data structure as recited in claim 1 which includes reliability information of any type, let alone reliability information which indicates a reliability of weight information corresponding to features of reference multimedia data included in the data structure.

10. Applicant's representatives have informed me that during prosecution of the parent application, the Examiner drew a correspondence between the data structure of the claimed invention and the search inquiry of Wang.

11. The Wang patent discloses that the search inquiry includes a number of image attributes corresponding to an image of interest to be retrieved during a database search. Wang further discloses that a user may provide a ranking of importance of those image attributes. This ranking is in the form of ranking values R_i assigned to the image attributes specified in the search inquiry. These ranking values are taken into consideration by a high-level analyzer 123, which performs a database search based on the image attributes included in the search inquiry.

12. The Wang patent does not teach or suggest that its search inquiry includes any information indicating how reliable those ranking values are, i.e., the Wang search inquiry does not include reliability information indicating reliability of weight information included in a data

structure as recited in claim 1.

13. The Wang patent further discloses that the ranking values may be recomputed based on results obtained from an initial evaluation of a search inquiry. The recomputed values are then compared to respective threshold variance values by a high-level analyzer 123. Based on this comparison, image attributes corresponding to the recomputed ranking values are determined to be significant or not to the search inquiry.

14. Applicant's representatives have informed me that the threshold variance values were alleged to correspond to the reliability information recited in claim 1. The Wang patent, however, does not teach or suggest that the threshold variance values are stored in the search inquiry of Wang. In fact, Wang teaches away from the claimed invention when it discloses that the threshold variance value for each image attribute is applied by high-level analyzer 123 to newly computed ranking values. That is, one of ordinary skill in the art would conclude from reading the Wang patent that the threshold variance values are not stored in a search inquiry but rather are separately stored in a memory device associated with the high-level analyzer.

15. In summary, the Wang patent does not teach or suggest a data structure used as a basis for performing an image or multimedia data search that includes a reliability information indicating a reliability of the weight information as recited in claim 1.

16. Claim 18 recites a data structure embodied in a computer-readable medium for a multimedia data searching or browsing system. The data structure includes multimedia data, variable information representing features of the multimedia data, and reliability information representing a reliability of the variable information. The Wang patent does not teach or suggest a data structure having the type of reliability information recited in this claim.

17. Claim 29 recites a data structure embodied within a computer-readable medium, comprising feature information corresponding to at least one image feature, weight information indicative of an importance of the image feature, and reliability information indicative of a reliability of the weight information. The Wang patent does not teach or suggest a data structure having the type of reliability information recited in this claim.

18. Claim 37 recites a method of searching for multimedia information, comprising obtaining a data structure which includes feature information corresponding to at least one image feature, weight information indicative of an importance of the image feature, and reliability information indicative of a reliability of the weight information, and searching a storage system of multimedia information based on the data structure. The Wang patent does not teach or suggest a method for searching multimedia information based on a data structure having the type of reliability information recited in this claim.

19. Claim 48 recites a system of searching multimedia information, comprising a storage device which stores a data structure having (a) feature information corresponding to at least one image feature, (b) weight information indicative of an importance of the image feature, and (c) reliability information indicative of a reliability of the weight information; and a processor which searches said multimedia information based on the data structure. The Wang patent does not teach or suggest a system for searching multimedia information based on a data structure having the type of reliability information recited in this claim.

20. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such wilful false statements may jeopardize the validity of the application or any patent issuing therefrom.

2003/9/3

Mr. Jin-Soo Lee Date